In-Situ Pipe Decontamination System

Deactivation & Decommissioning Focus Area
FY 1999 Mid-Year Review
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Federal Energy Technology Center
Morgantown, WV

Presented By:
Florida International University
Hemispheric Center for Environmental Technology

PROJECT DESCRIPTION

- Project Goals and Objectives
  - To develop a low-cost and efficient system for in-situ pipe decontamination, which
    - » does not release contaminants into environment, generates minimum secondary waste
    - » can be used for different pipe configurations
- Expected Outcome/Benefit
  - Reduced Worker Risk through Work Avoidance
  - Opportunity to Recycle of pipe material
  - Cost saving

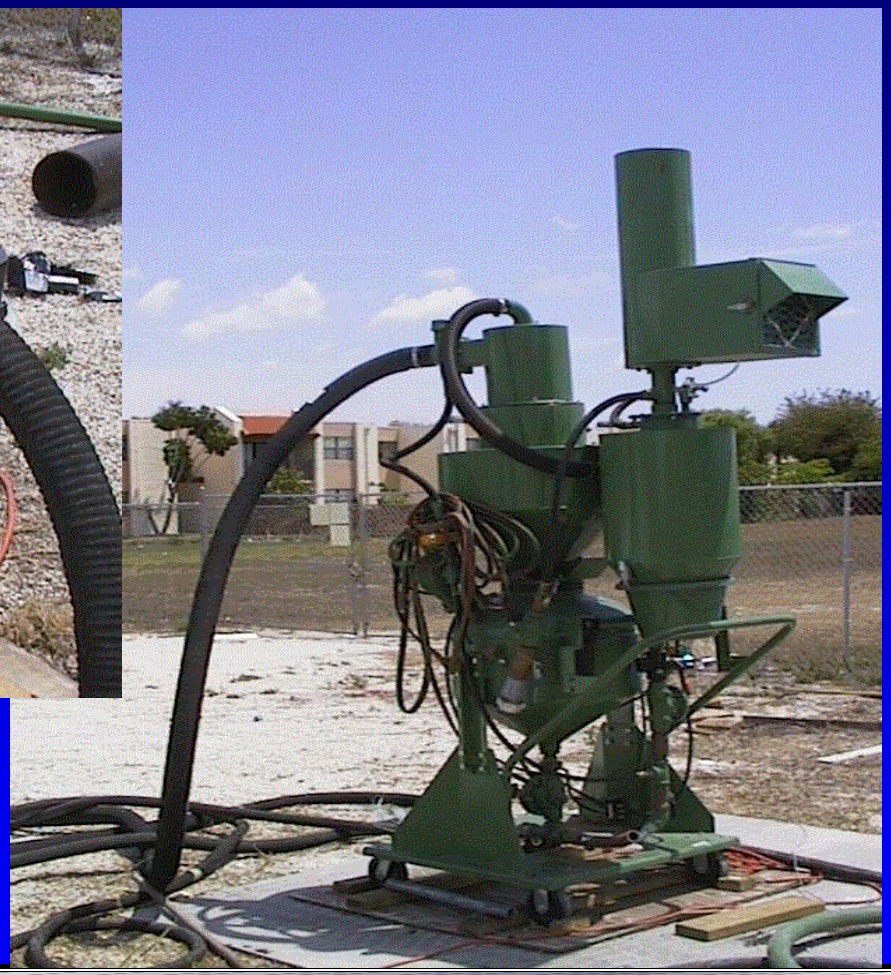
NEEDS ASSESSMENT

- EM needs
  - ID-7.2.04 Metal decontamination
  - CH-DD03-99 Metal decontamination
  - RL-DD-21 Metal decontamination and recycling for the D&D program
  - SR99-4003 Material recycle (process equipment, metal, steel, and concrete)
- End users
  - DOE
  - Commercial

TECHNICAL APPROACH

- Determine performance factors for the system.
- Assess technologies and select the most suitable.
- Perform technology enhancement/integration to accommodate horizontal pipe.
- Assess decontamination system.
- Perform cost/benefit analysis.
- Demonstrate and Commercialize system.

Compressed Air Operated Grit Blast Unit



PROJECT DELIVERABLES

- Completed Prototype System
- Performance and Cost-benefit analysis of the system
- User manual and reports

TECHNICAL PROGRESS/STATUS

Accomplishments -

- Reviewed various pipe decontamination technologies - selected grit blasting technology
- Decontamination system tested, design plan for deployment system prepared

TECHNICAL PROGRESS/STATUS

- **Milestone 1. Select technology (**establish operating criteria (production rate, and decontamination factor) of the new and integrated technology)

  Completed
- **Milestone 2. Design plan**

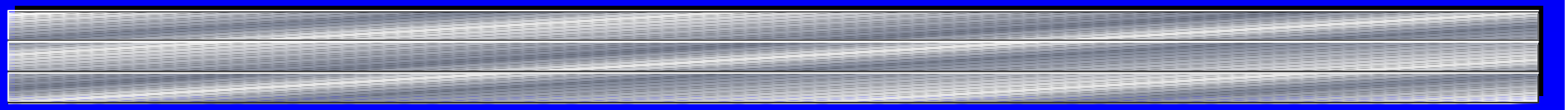
  Completed
- **Milestone 3. Approved design drawings and cost/benefit analysis**

  Due Date: 6/11/99, in progress
- **Milestone 4. Fabricate prototype system & test plan; vendor/teaming partner**

  Due Date: 10/15/99

ISSUES

- No Significant Issues identified to Date



PATH FORWARD

- Fabricate and test the system
- Deploy the fabricated system at DOE sites

PROJECT POINTS OF CONTACT AND INFORMATION SOURCES

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